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A NEW GRAY-CROWNED ROSY FINCH FROM NORTHERN ALASKA

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A comparison of a series of twelve May and June specimens (7 males, 5 females) of Leucosticte tephrocotis collected in the Brooks Mountains of Alaska for, and by, Dr. L. Irving show distinct characteristics by which these northern Alaskan specimens can be separated from their closest (in appearance) relatives, Leucosticte tephrocotis tephrocotis. The Brooks Mountains specimens possess a brighter tone to the brown coloration found above and below. This brown apparently contains more of a reddish color, which is best noted on the under surface, than L. t. tephrocotis. The extent of red coloring on the rump, uppertail coverts and abdomen is of a deeper quality (quite similar in appearance to that found in L. t. littoralis), and on the under surface it covers a more extensive area than in L. t. tephrocotis. In addition the Brooks Range specimens possess a distinct gray occipital band which separates the black of the pileum from the brown of the back. This character is more noticeable in the males than in the females.

The differences stated above were first noted by Drs. Friedmann and Irving. Sometime before these specimens were given to me to examine another group of three July specimens were sent to Dr. Friedmann by Dr. Brina Kessel of the University of Alaska for positive identification. These specimens were collected in the mountains at the head of the Sheenjek River, Yukon Territory and Dr. Friedmann noted that "these agree with Irving's series in having more and deeper pink on the lower underparts and the rump . . . are worn . . . but they go together with the Anaktuvuk series."

On the basis of a definite distinction of the twelve summer specimens from the Brooks Range and the three specimens from the Sheenjek River, a new race is to be named, in honor of Dr. Laurence Irving, and described as follows:

Leucosticte tephrocotis irvingi subsp. nov.

Subspecific characters.—Differs from L. t. tephrocotis in averaging brighter colored above and below. The feathers of the dorsal tract having

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their web color, aside from the dark median streak, close to einnamon brown with light edges rather than Saccardo's umber with light edges as found in L. t. tephrocotis; the pileum averaging and appearing blacker; a definite gray occipital band separating the pileum from the back color; the red feather edging of the rump and uppertail coverts averaging a deeper red, more purplish; the malar and auricular regions darker; tertial edgings a deeper red, more purplish; the abdominal red-edged feathers are also a deeper red and are more extensive in their distribution.

Type.—U. S. Nat. Mus. no. 435409, adult male taken June 29, 1949 at Anaktuvuk Pass, Alaska by T. Brower with an original no. A493a.

Measurements.—Male (7 specimens), wing (chord), 104.4-110; (average 106.9); tail, 63.8-70 (66.8); culmen, 11.0-12.2 (11.5); tarsus, 19.3-20.4 (19.9); middle toe without claw, 14.0-15.2 (14.1) mm. Female (5 specimens), wing, 100.5-102.5 (101.8); tail, 62.0-65.2 (64.2); culmen, 11.2-11.8 (11.6); tarsus, 19.0-20.7 (19.8); middle toe without claw, 14.0-14.3 (14.2) mm.

Range.—Known only from the Brooks Mountains and immediate vicinity.

Remarks.—A comparison of the Brooks Range series with L. t. littoralis, which is its nearest relative geographically, shows a slight inclination towards littoralis in coloration. However, the series of irvingi lacks the gray malar area and auricular region. L. t. littoralis is a smaller form than either irvingi or tephrocotis. There are no mensural differences by which irvingi can be distinguished from tephrocotis. The following measurements of the comparative breeding series of tephrocotis and littoralis are given to show the size variation and as an aid in comparing the three forms. L. t. tephrocotis: male (5 specimens), wing, 104.5-108.2 (105.7); tail, 62.5-67.1 (64.6); culmen, 11.0-11.6 (11.3); tarsus, 19.3-20.7 (19.9); middle toe without claw, 14.5-15.2 (14.8) mm. Female (6 specimens), wing, 100.0-104.1 (101.4); tail, 56.7-65.3 (61.8); culmen, 11.2-11.8 (11.5); tarsus, 18.2-19.3 (19.0); middle toe without claw, 14.1-15.0 (14.3) mm. L. t. littoralis: male (8 specimens), wing, 99.0-105.8 (103.1); tail, 58.2-66.7 (63.2); culmen, 10.5-11.1 (10.9); tarsus, 19.1-20.4 (19.9); middle toe without claw, 14.0-14.8 (14.3) mm. Female (6 specimens), wing, 94.0-100.2 (95.8); tail, 57.2-61.0 (58.5); culmen, 10.2-11.6 (10.9); tarsus, 19.0-20.4 (19.6); middle toe without claw, 14.0-15.0 (14.3) mm.

The comparative breeding material was selected from the northern portions of the United States and all localities to the north. This will explain why the tephrocotis series measured is so small. The large Californian breeding series in the U. S. Nat. Mus. collection was measured and compared and was found to agree with the more northern representatives of L. t. tephrocotis. The northernmost record for the nominate race is from Mountains near Eagle, Alaska. An attempt was made to borrow material from the intervening area, that is, from Eagle to the Brooks Range, but no other institutions were found to possess specimens from this questionable area. In the U.S. Nat. Mus. collection there are four winter specimens from this area; the area to the south of the Brooks Range. Two specimens are from Bettles and two are from Boulder Creek, a tributary of the Cheena River. All four specimens were collected in the month of October and were referred to Irvingi. It appears that irvingi is geographically isolated from the other races of the species by hundreds of miles of terrain apparently unsuitable for a rosy finch.